ATTACHMENT 1

Second Surrebuttal Report of

David T. Robinson, PhD

February 1, 2008

Signed: David T. Robinson, PhD

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1 Introduction and Overview

1.1 Engagement

This second surrebuttal report has been prepared at the request of counsel for Norfolk Southern Railroad in response to a series of developments that have transpired since my initial surrebuttal report filed on June 11, 2007. These developments are:

- Mr. Robert Taylor's December 7, 2007, corrected report in which he presents new opinions about the alleged lost business value that Avondale suffered;
- The deposition of Mr. Robert Taylor on January 11, 2008; and,
- Efforts on behalf of Plaintiff to have the relevant date for calculation of alleged losses established as May 26, 2006.

My hourly compensation in this matter is $700 and does not depend on my findings, nor does it depend on the outcome of this case.

In addition to the materials reviewed in forming my initial opinion, in preparing this report I have reviewed the corrected reports of Mr. Taylor (dated December 7, 2007), the additional deposition testimony of Mr. Robert Taylor taken on January 11, 2008, and the additional deposition testimony of Mr. Stephen Felker taken on January 28, 2008. A complete list of documents considered in this report is included as Appendix B. I will supplement this report if material information comes to my attention after this report is submitted.

1.2 Professional Qualifications

My qualifications were provided in my report filed January 19, 2007. An updated copy of my professional resume is attached as Appendix A to this report.

1.3 Executive Summary

My report will proceed in three steps:

1. Although I have no opinion as to whether the January 5, 2005 train derailment caused the company to begin liquidation on May 26, 2006, I first provide a valuation of the company that conforms to the "slow death" scenario, which assumes that the correct date for valuing alleged business losses is May 26, 2006. This is provided in Section 2. Here I show that the value of the company as a going concern on May 26, 2006 was approximately $49 million.

2. I address the relevance of the distinction between operating and non-operating assets for the purposes of determining the liquidation proceeds of Avondale after May 26, 2006. Because the entire exercise of determining lost business value is predicated on comparing a company's value prior to an alleged tort to the value of the company after the alleged tort, I show that for Mr. Taylor's analysis to have any logical validity whatsoever, it must at a minimum use the same distinctions between operating and non-operating assets in liquidation as it does in the determination of the but-for company value in the absence of the derailment. This appears in Section 3.

3. I address the $100 million payment that Avondale received from Fac-

tory Mutual and the relevance of it for determining the liquidation proceeds of Avondale after May 26, 2006. In his January 11, 2008 deposition, Mr. Taylor simultaneously claims that the Factory Mutual payment does not relate to the value of the company at all, and that it is like a loan to Avondale. Logically, these statements cannot both be correct. In fact, neither are correct. In Section 4 I demonstrate that the only appropriate course of action is to include the $100 million Factory Mutual payment in the liquidation proceeds of Avondale.

2 Lost Business Value and the Slow Death Scenario

2.1 Valuing Avondale as of May 26, 2006

For this report I have been asked to contemplate determining the value of Avondale as of May 26, 2006. Although I do not believe this date is relevant for determining any potential loss in business value that may have occurred, it is straightforward to arrive at a May 26, 2006 valuation figure by extending my initial analysis in accordance with the basic principles of financial analysis.

Figure 1: Timeline for Calculating Potential Damages

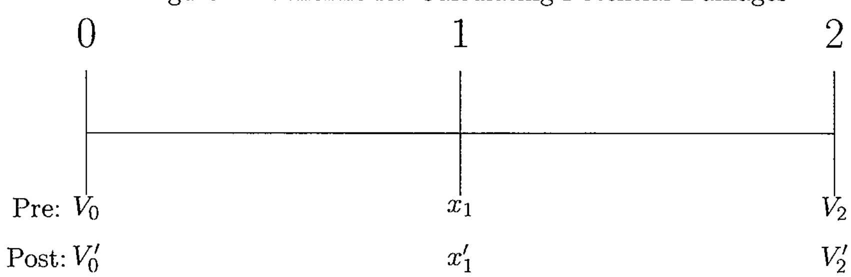

Figure 1 provides a simplified depiction of the relevant dates for determining any potential lost business value that might be associated with the train derailment.

Time 0 is the point in time corresponding to the derailment. Time 1 reflects the interim period after the derailment occurred but before the decision to liquidate was made. Time 2 reflects the time at which the liquidation decision occurred. In the case of Avondale, this is presumably May 26, 2006.

The variables V_0 and V_2 denote the value of Avondale at two points in time; V_0 denotes the value of Avondale immediately prior to the derailment,

and V_2 denotes the value of Avondale at the date of the liquidation decision. The variable x_1 denotes the operating cash flows (either gains or losses) that flowed to the company in the interim period between the time of the derailment and the time of the liquidation decision. Finally, the variables in the top row (labeled 'Pre:') represent the values that would have obtained in the absence of the derailment, while the values in the second row (labeled 'Post:', variables denoted by the $'$ symbol) denote the values that obtained in the presence of the derailment.

Using the algebra provided in this figure, my approach has been to compare the value of the business immediately prior to the derailment, which is denoted V_0, to the value of the firm immediately after the derailment, which is denoted by V_0'. I concluded in both my reports that because the value of the firm as a liquidated entity far exceeded its value as a going concern, that V_0' exceeded V_0, and indeed no loss of business value occurred.

By making use of the fact that the value of a firm at a point in time is the present discounted value of its future cash flows, Figure 1 provides an immediate mechanism for determining the value of Avondale on May 26, 2006. Notice that the definition of the value of a firm at a point in time implies the following relation between V_0, x_1 and V_2:

$$V_0 = \mathrm{E}_0 \left[\frac{x_1}{(1+r)} + \frac{V_2}{(1+r)^2} \right] \tag{1}$$

where the notation E_0 denotes the fact that at time 0, an expectation of future cash flows must be taken based on relevant information available at time 0.[1] Thus, Equation 1 illustrates that the value of the firm immediately

[1] Note that by the same logic as in Equation 1, V_2 represents the sum of all cash flows that would accrue to the firm after the May 26, 2006 termination date.

prior to the derailment is simply the value of the interim cash flows that would have obtained in the absence of a derailment plus the value of the firm had it been sold as a going concern on May 26, 2006 in the absence of a derailment.

Using the logic of Equation 1 it is straightforward to show that the value of Avondale on May 26, 2006 is less than the value of the company of 1/5/2005. To illustrate this logic, let me turn to my report dated January 19, 2007, in which I calculated a value of Avondale as of 1/5/2005 based on expected future cash flows. From Table 2 on page 11 of my report dated January 19, 2007, I obtained an enterprise value based on historical trend projections that ranged between \$27 and \$87 million. Taking the value of Avondale under their own sales growth assumptions and a 20.23% discount rate gives me an estimate of V_0 of \$58 million. In addition, Table 10 on page 60 of my initial report provides an estimate of Avondale's future cash flows that is consistent with this valuation scenario: using these numbers, I can obtain an expected value of the intermediate cash flows that were reasonably expected to accrue to Avondale between 1/5/05 and 5/26/06. Based on my analysis in Table 10 of my initial report, my estimate of the intermediate cash flows is approximately \$23.694 million.[2] Using this, I can make use of Equation 1 to show that this implies a May 26, 2006 value for Avondale of \$49.54 million. Algebraically, this can be derived immediately from Equation 1 as follows:

$$V_0 = \mathrm{E}_0\left[\frac{x_1}{(1+r)} + \frac{V_2}{(1+r)^2}\right] \qquad (2)$$

[2] I obtain this number by summing \$3.356 million, \$8.988 million and \$11.350 million, which are my estimated free cash flows in this valuation scenario between 1/5/05 and 8/26/06, which is the closest date to 5/26/06 for which I have available information.

$$V_0 = \mathrm{E}_0\left[\frac{x_1}{(1+r)}\right] + \mathrm{E}_0\left[\frac{V_2}{(1+r)^2}\right] \tag{3}$$

$$V_0 * (1+r) = \mathrm{E}_0[x_1] + \mathrm{E}_0\left[\frac{V_2}{1+r}\right] \tag{4}$$

$$\$58 * (1.2023) = \$23.694 + \frac{V_2}{1+r} \tag{5}$$

$$V_2 = \$46.04 * (1.2023)^{0.4} = \$49.54$$

Therefore, to summarize my calculations in this section, I obtain a value for Avondale on May 26, 2006 of approximately $49.54 million by taking my initial valuation of approximately $58 million—an intermediate value from my initial analysis dated January 19, 2007— and subtracting the expected cash flows that would have likely obtained had no train derailment occurred.[3] By the very fact that firm value is the present discounted value of future cash flows, this difference is the value of the Avondale on May 26, 2006. Regardless of the particular valuation assumptions used to arrive at Avondale's enterprise value, Avondale is worth less on 5/26/06 than it was worth on 1/5/05.

2.2 Mr. Taylor's December 7 Report Incorrectly Uses a January 5, 2005 Business Valuation

The logic of financial analysis imposes a discipline on financial calculations that is simply not present in Mr. Taylor's analysis. In his January 11, 2008 deposition testimony, Mr. Taylor asserts that it is appropriate to take a

[3] For algebraic simplicity I have assumed in Equation 1 that the intermediate cash flows occurred one discounting period after the derailment, and that the liquidation occurs two discounting periods after the derailment. In deriving the $49.54 million value for Avondale as of 5/26/06, I assumed that the intermediate cash flows of $23.694 million occurred on 1/5/06, and that V_2 is to be determined as of 5/26/06—a mid-year valuation relative to 1/5/06. Raising the second discount rate adjustment to the power of 0.4 reflects this mid-year adjustment.

valuation of Avondale as of 1/5/05 and has clarified that he simply moved that valuation forward more than 16 months to 5/26/06 without adjusting the value for the cash flows it had already received as well as for the deterioration in economic conditions.[4] This element of his analysis abuses the basic principles of finance in important ways.

One of the most fundamental and egregious errors that Mr. Taylor makes in his December 7 report is to take the valuation performed by Robert Del Genio, which values Avondale at approximately $306 million as of January 5, 2005, and use it as the valuation for the company as of May 26, 2006. As I have shown in the preceding discussion, this is an incorrect approach to valuing Avondale because it ignores the cash flows that the firm enjoyed in the time between January 5, 2005 and May 26, 2006. At a minimum, it overstates the value of Avondale by some $43 million dollars, since it overlooks the cash flows that accrued to the firm between 1/5/05 and 5/26/06. This would be true even if one were to ignore the previously demonstrated errors in the $306 million valuation figure. One can reasonably expect, however, that a going-concern valuation of Avondale as of 5/26/06 would be substantially lower than $306 million based on the arguments I have made in previous reports.

[4] See page 207 of 320 of Mr. Taylor's January 11, 2008 deposition testimony.

3 The Distinction between Operating vs. Non-operating Assets in Liquidation Must Conform to the Distinction Used to Value the Company Prior to the Derailment

The deposition testimony of Mr. Robert Taylor provided on January 11, 2007, reveals that many changes have taken place between the March 23, 2007 Taylor report and the December 7, 2007 corrected Taylor report. One of the most fundamental changes from a substantive as well as theoretical point of view has been the reclassification of many assets as operating or non-operating assets.

While it is all but impossible for me to know the exact details of every reclassification, the 1/28/08 deposition testimony of Mr. Stephen Felker illustrates that numerous operating assets were included in the $7.8 million sale to GAC holdings of various Avondale properties. The assets sold in the $7.8 million transaction to GAC holdings include Gregg warehouse, an administrative building, a parking lot for Avondale employees, as well as land that supplies water used in the Gregg plant dying and finishing processes.[5]

More generally, the basic logic of Figure 1 offers some guidance as to the overall validity of such reclassifications. Namely, any asset that is classified as an operating asset for the purposes of determining a value of Avondale prior to the derailment must also be considered an operating asset for the purposes of determining the liquidation value. Any attempt to do otherwise results in an "apples versus oranges" comparison, in which two unlike things are being compared to one another.

[5]Source: Deposition testimony of Mr. Stephen Felker, Sr., page 6-8 of rough draft deposition.

Even if the proposed valuation methodologies of Mr. Taylor do not explicitly rely on a value of Avondale prior to the derailment, this logic still binds Mr. Taylor's analysis in critical ways. In particular, any assets which were responsible in generating the profits that occurred in the interim period (as represented by the variable x_1 in Figure 1) must be included as operating assets for the purposes of liquidation. Any attempt to do otherwise, in particular to classify assets as non-operating when they were responsible for generating interim cash flows and when they are explicitly recognized in the value of the firm on May 26, 2006, is an attempt to inflate the purported damages by excluding from consideration certain proceeds from liquidation that are otherwise understood to be responsible for generating Avondale cash flows.

4 The $100 million Factory Mutual payment should be Considered in the Liquidation

Mr. Taylor's December 7, 2007 calculations erroneously exclude the proceeds of the Factory Mutual settlement from the liquidation value of the firm. He was correct in his initial March 23, 2007 report when he included them in his valuation of the company.

There are a number of reasons why the logic of financial analysis compels Mr. Taylor to include the proceeds from the Factory Mutual payment in the value of Avondale. First, according to plaintiff's claims, the Factory Mutual proceeds take the place of assets that were used to generate operating cash flows for Avondale. Therefore, to the extent that Mr. Taylor's analysis relies on valuations performed prior to the derailment, Mr. Taylor is comparing apples to oranges by excluding the Factory Mutual proceeds: he is compar-

ing the value of the firm with certain assets in place to a liquidation value that excludes assets covered by the Factory Mutual settlement. In essence, it is as if the Factory Mutual proceeds represent the liquidation of certain operating assets: Mr. Taylor effectively seeks to exclude those operating assets from the liquidation value of the firm by excluding the Factory Mutual settlement proceeds.

In addition, the reasons that Mr. Taylor offers for excluding the Factory Mutual proceeds are incorrect. Mr. Taylor states in his deposition of January 11, 2008 two views of the FM payment:

- "I mean, it is a funding source, it is like a loan, really, to me...." (Page 59, lines 6 and 7)
- "these proceeds from FM to me don't relate to the valuation of the business in any form at all...." (Page 60, lines 3-5)

As a matter of simple logic, these statements cannot both be correct. Loans have a direct and clear impact on the value of a company. Suppose a company has assets of $100 which are owned entirely through common stock. In that case, the firm's balance sheet would show $100 in assets and $100 in common stock. Now suppose that firm receives a loan of $100. After it has received the loan, the right-hand side of the balance equals $200: $100 in common stock and $100 in debt outstanding. On the left-hand side of the balance sheet, the assets of the firm would be grossed up by $100 to account for the infusion of capital into the firm. This simple example illustrates the fact that these statements contradict one another.

In fact, neither of these statements is correct.

First, the Factory Mutual payment is not like a loan. It resembles a loan in no way whatsoever. As I have argued above, the Factory Mutual payment

is like the liquidation of an operating asset: it is an economic transaction in which operating assets have been converted into cash.

Second, the Factory Mutual payment has enormous ramifications for the firm's value. To claim otherwise is unreasonable. It cannot be ignored because it reflects the liquidation of an asset. To remove the Factory Mutual payment from the liquidation proceeds of the firm has exactly the same effect as excluding an operating asset from consideration in determining the liquidation value of a firm.

A Professional Resume for David T. Robinson

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Education

Ph.D., MBA, University of Chicago Graduate School of Business, 2001

- Dissertation: "Strategic Alliances and the Boundaries of the Firm," under the supervision of Luigi Zingales (chair), Steven Kaplan, Toby Stuart, and Per Strömberg.

M.Sc., The London School of Economics and Political Science, 1993

B.A. (with Highest Honors in Economics), University of North Carolina at Chapel Hill, 1992

Employment History

Associate Professor of Business Administration, Fuqua School of Business, Duke University (Since 7/2007)

Assistant Professor of Business Administration, Fuqua School of Business, Duke University (7/2003-7/2007)

Assistant Professor of Finance and Economics, Graduate School of Business, Columbia University (7/2001-7/2003)

Math Instructor, University of Chicago Graduate School of Business, Executive MBA Program (Barcelona, Singapore, and Chicago, 1999-2001)

Research and Teaching Assistant, University of Chicago Graduate School of Business, (1997-2001)

Applications Programmer, Carolina Population Center, University of North Carolina at Chapel Hill (1994-1996)

Publications

1. "Product Markets, Internal Capital Markets, and the Boundaries of the Firm," with Rich Mathews. Forthcoming, *Journal of Finance.*
2. "Strategic Alliances and the Boundaries of the Firm." Forthcoming, *Review of Financial Studies.*
3. "The Market for Mergers and the Boundaries of the Firm," with M. Rhodes-Kropf. Forthcoming, *Journal of Finance.*
4. "Optimism and Economic Choice," with M. Puri. NBER Working Paper 11361. Forthcoming, *Journal of Financial Economics.*
5. "Optimal Mechanisms for Mergers and Acquisitions," with S. Brusco, G. Lopomo, and S. Viswanathan. *International Economic Review.* Volume 48, August 2007.
6. "Financial Contracting in Biotech Strategic Alliances," with T. Stuart. Forthcoming, *Journal of Law and Economics.* Volume 50, Number 3, August 2007.
7. "Network Effects in the Governance of Biotech Strategic Alliances," with T. Stuart. *Journal of Law, Economics, and Organization.* Volume 23, number 1, Spring, 2007. pages 242-273.
8. "Industry Concentration and Average Stock Returns," with K. Hou. (August, 2006) *Journal of Finance.* **61**:4, pages 1927-1956.
9. "Valuation Waves and Merger Activity: The Empirical Evidence," with M. Rhodes-Kropf, and S. Viswanathan. (2005) *Journal of Financial Economics.* **77**:4, pages 561-603.
10. "What is the Price of Hubris? Using Takeover Battles to infer Overpayments and Synergies," with P. Hietala and S. Kaplan. (Summer, 2004) *Financial Management,* **32**:3, pages 1-32. Also circulated as NBER working paper #9264. 2^{nd} place prize winner, Addison-Wesley prize for the best paper in *Financial Management.*
11. "Adjustment of Iron Intake for Dietary Enhancers and Inhibitors in Population Studies: Bioavailable Iron in Rural and Urban Residing Russian Women and Children," with Marilyn Tseng, Hrishikesh Chakraborty, Michelle Mendez, and Lenore Kohlmeier. (August, 1997) *The Journal of Nutrition* **127**:8, pp. 1456-1468.

12. "Strategic Alliances and Joint Ventures," chapter in Handbook of Modern Finance, Dennis Logue and James Seward, editors. Warren, Gorham & Lamont, New York.

Conference Discussions and Presentations

Olin Corporate Governance Conference (2006)
NBER: Summer Institute, 2004, 2005; Entrepreneurship, 3/05; Behavioral Finance 4/03; Strategic Alliance Conference 3/02
World Bank Conference on Entry, Entrepreneurship, and Financial Development, 2005
American Finance Association Annual Meeting: 2006, 2005, 2004, 2003, 2001
European Finance Association Annual Meeting: 2004, 2003, 2000, 1999
Texas Finance Festival, April, 2003
Western Finance Association Annual Meeting, 2005, 2003 (discussant), 2002, 2001
Batten Young Scholars Conference at William & Mary, 2004, 2002
Real Options Group International Conference on Real Options, Paphos, Cyprus, 2002
Academy of Management Annual Meeting, 2001
Econometric Society: North American Winter Meeting, 2001
Harvard Business School Strategy Conference, 2000
Georgia Tech International Finance Conference, 1999

Invited Presentations

Southern Methodist University, University of British Columbia (3/2007); Carnegie Mellon University (2/2007); Université de Lausanne (12/06); USC, Rice (10/06); Indiana, Columbia (9/06); Maryland (12/05); NCSU Economics (10/05); Chicago GSB (3/05); Carnegie-Mellon (2/05); Ohio State (1/05); Virginia Tech (12/04); The University of Washington (11/04); Stockholm School of Economics, Texas Christian University (3/04); University of Kansas (1/03); MIT/Harvard Organizational Economics Seminar (12/02); Arizona State University, U.S. Federal Trade Commission (4/02); Rutgers University (2/02); London Business School, NYU/Columbia Law & Economics Seminar (10/01); Columbia, Cornell, Duke, HBS, Maryland, Michigan, NYU, Texas, UNC, USC, Wharton (2/01)

Professional Service

Ad-hoc referee for *The American Economic Review, The Journal of Finance, The Journal of Political Economy, The Review of Financial Studies, The Journal of Financial Economics, The Rand Journal of Economics, The Journal of Financial Intermediation, The Journal of Banking and Finance, Management Science, The Journal of Development Economics, Industrial and Corporate Change, Research Policy, International Journal of Industrial Organization, The Journal of Economic Behavior and Organization, The Academy of Management Review.*

Program committee associate chairperson for Western Finance Association (2007).

Program committee member for Western Finance Association (2006), European Finance Association (2006), Financial Management Association (2006, 2007), Olin Conference for Corporate Finance (2007)

Awards and Honors

- Daimler-Chrysler Award for Innovation and Excellence in Teaching, 2007.
- Daimler-Chrysler Award for Innovation and Excellence in Teaching, 2006, Finalist.
- Addison-Wesley prize for the best paper to appear in *Financial Management*, 2^{nd} place, 2004.
- Oscar Mayer Doctoral Fellowship, 2000-2001
- Semi-Finalist, Lehman Brothers Research Excellence in Finance Fellowship, 2001
- First Place, Chicago Quantitative Alliance Academic Research Prize, August, 1999
- University of Chicago Graduate School of Business Doctoral Fellowship, 1997-2000
- Russell Sage Foundation Summer Scholar, Institute for Behavioral Science, Stanford University, Summer, 1998
- Eagle Scout, August, 1987

B Supplemental List of Works Considered

- Deposition Transcript (Rough): Robert Taylor dated January 11, 2008 in Avondale Mills, Inc. v. Norfolk Southern Corp., et al., No. 1:05-2817:MBS
- Deposition Transcript (Rough): Jack Altherr dated December 14, 2007 in Avondale Mills, Inc. v. Norfolk Southern Corp., et al., No. 1:05-2817:MBS
- Deposition Transcript (Rough): Stephen Felker dated January 28, 2008 in Avondale Mills, Inc. v. Norfolk Southern Corp., et al., No. 1:05-2817:MBS
- Expert Report: Donald Raulerson in Avondale Mills, Inc. v. Norfolk Southern Corp., et al., No. 1:05-2817:MBS
- Rebuttal Expert Report: Robert Taylor dated March 22, 2007 in Avondale Mills, Inc. v. Norfolk Southern Corp., et al., No. 1:05-2817:MBS
- Corrected Rebuttal Expert Report: Robert Taylor dated December 7, 2007 in Avondale Mills, Inc. v. Norfolk Southern Corp., et al., No. 1:05-2817:MBS